



SECOR INTERNATIONAL INCORPORATED

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August 2, 2005

TO:

Mr. Russell Hart, RPM

United States Environmental Protection Agency

Region V

77 West Jackson Boulevard Chicago, Illinois 60604-3590

FROM: Mr. David Curnock, PM, SECOR International Incorporated

RE:

MONTHLY PROGRESS REPORT/MEMORANDUM

Area 9/10 Remedial Design

Southeast Rockford Groundwater Contamination Superfund Site

Rockford, Illinois

Copies:

Mr. Thomas Turner, Regional Counsel, USEPA Region V

Mr. Scott Moyer, Hamilton Sundstrand/United Technologies Corporation

Ms. Kathleen McFadden, United Technologies Corporation

Mr. Thomas Williams, PM, IEPA

Mr. Terry Ayers, IEPA

CURRENT MONTH PROJECT ISSUES/STATUS: (activities, meetings, deliverables, etc.) Activities conducted in July 2005 consisted of the continuation of Pre-Design Investigation and conceptual design activities. Based on recent discussions between USEPA, IEPA, and SECOR, there are two areas of focus at this time with respect to the Remedial Design. These areas are the former RCRA Outside Container Storage Area (OSA) and the area beneath the Hamilton Sundstrand (HS) Plant #1, up-gradient of the additional monitoring wells installed in the western portion of the South Alley.

A work plan for source mass removal in the OSA was submitted to USEPA and IEPA in April. The work plan provided an analysis of the Pre-Design Investigation data collected to date, the rationale for the source removal effort, and a description of the planned activities. Comments on the work plan were received from USEPA and IEPA on May 31, 2005. Over the period of June and July there has been discussion between USEPA, IEPA, and SECOR (on behalf of HS) regarding the planned activities and one informal meeting. A response letter to the comments on the work plan was submitted to USEPA on June 28, 2005. USEPA is presently developing an announcement in the form of an explanation of significant differences (ESD) as part of the approval of the work plan.

The proposed OSA excavation activities are adjacent to and within the Illinois Central Railroad (ICR) easement. The ICR is owned by the Canadian National Railroad. SECOR, on behalf of HS, has initiated contact for approval of this work. Other activities in July include review of landfill options for the site material and preparation of the final acceptance paperwork with The Environmental Quality Company (EQ) for the disposal of the waste at their Belleville, Michigan facility. SECOR has also collected the initial groundwater field measurements and groundwater samples for electron acceptor parameter analyses. The groundwater samples were shipped to STL located in University Park, Illinois. The analytical

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results will serve as the baseline for site conditions and assist in the calculation of the volume of HRC-X material for placement in accordance with the work plan. The analytical data are presently under review.

The second area of focus is the area beneath the HS facility identified as a location of potential source material based on down-gradient groundwater monitoring results. The most likely location of the potential source material is associated with the former area of underground storage tanks (USTs) which were in the central portion of the plant south of the loading dock area. With access to the inside of the building unavailable, alternative means have been explored and horizontal drilling appears to be the most effective method of infrastructure installation.

A preliminary conceptual design for horizontal wells and pilot testing letter was submitted to USEPA and IEPA in May 2005. This letter provided an overview of the currently envisioned potential horizontal well and pilot testing treatment corridor. The plan outlined the optimal installation and treatment area without consideration of access constraints (both off-site and on the property).

Pilot testing of the horizontal wells will be a necessary part of the overall remedial design. The horizontal air sparge (AS) and soil vapor extraction (SVE) wells that are planned for pilot testing will likely become part of the final remedial design. This is consistent with a final remedial system design utilizing the Record of Decision (ROD) prescribed technologies for Area 9/10.

Off-site access for horizontal drilling will be required. Access to the property to the south of the plant (2525 11<sup>th</sup> Street) and beneath the Illinois Central Railroad (ICR) spur line north of the plant will be necessary. SECOR researched the Winnebago County property records and identified that the property to the south (formerly identified as the DRB property) was sold in December 2004. The property is now held in trust by Amcore Investment Trust #817776. SECOR, in coordination with the HS legal department, plans to identify an authorized representative of this entity and engage the new property owner regarding site access. The ICR access for horizontal wells will be discussed after approval for the OSA excavation activities are confirmed.

To facilitate the preparation of the work plan for the AS and SVE horizontal well installation and pilot testing, the installation of a horizontal groundwater monitoring well beneath the facility is being proposed. Knowledge of the concentrations of various constituents of concern in groundwater will assist in the pilot test work plan development effort.

A brief horizontal groundwater monitoring well work plan will be prepared which outlines the scope of work to be undertaken. This brief plan will provide specific well installation, well development, and the baseline sampling to be performed. Prior to submittal of the horizontal monitoring well work plan, the new property owner to the south (2525 11<sup>th</sup> Street) and ICR will be contacted regarding access for the installation and future operation of the horizontal groundwater monitoring well and other pilot test wells. If successful, this effort

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will confirm the viability of the optimal locations previously identified. If access is denied or modifications are required, alternate locations and alignments may be developed. The target submittal date for the horizontal groundwater monitoring well work plan is August 2005. The data from the horizontal groundwater monitoring well will be used as input for the development of the AS and SVE horizontal well pilot test infrastructure and test procedures. The target date for the submittal of the AS and SVE Horizontal Pilot Test Work Plan is Fall 2005.

The operation and hydrocarbon recovery of LNAPL (JP-4) from the recovery system in the south alley continues. The second quarter 2005 recovery system operational data is being reviewed and compiled. A round of water levels (and product measurements if present) from these wells will be completed in the third quarter 2005.

FUTURE PROJECT ISSUES/STATUS: (activities, meetings, deliverables, etc.)

Future project activities anticipated for August 2005 include:

- Continue on-going preparation activities for the implementation of the OSA Work Plan for Source Reduction.
- Approval of the OSA work plan by USEPA/IEPA. Assuming that there are no significant changes to the scope of work, it is anticipated that this effort will be approved for implementation in Summer 2005.
- Upon approval of the OSA work plan, SECOR will commence final preparations for completion of the work. These activities will include HRC-X procurement and placement, short term groundwater monitoring to confirm changes in the aquifer electron acceptor concentrations, well abandonment, and secure commitment dates from excavation and transportation contractors for work plan execution.
- Continue to compile the Pre-Design Investigation data into the Data Summary Report. This report will include boring logs, figures, groundwater flow information, and all laboratory analyses undertaken as part of the Pre-Design Investigation.
- Monitoring and evaluation of LNAPL (JP-4) presence and recovery at the eastern end of the South Alley will continue. It is anticipated that the second quarter 2005 recovery information summary table will be provided as part of the August activity summary monthly memo.
- Engage the new property owner to the south and ICR regarding access for horizontal well installations, pilot test access, and longer term AS and SVE system operation.
- Develop a brief scope of work/work plan for the installation, development, and baseline sampling of a horizontal groundwater monitoring well.

A letter was submitted to the USEPA and IEPA in May which outlined the conceptual horizontal SVE and AS well installation, well alignment, and pilot testing activities in support of future design efforts. Additional discussions, both internally and with the USEPA and IEPA, are anticipated with respect to horizontal drilling and additional pilot testing prior to preparation of a final design.

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One topic of these discussions will be the required set back distances and off-site access for horizontal drilling. This issue has the potential to affect the overall design and constructability of a system. Currently, there is a presumption of reasonable access to the off-site property(s). However, the property to the south (formerly identified as the DRB property) located at 2525 11<sup>th</sup> Street has been sold. The level of cooperation of the new owners could affect current and future access. SECOR will be working along with Tom Williams of IEPA to identify and contact the new owners to initiate continued and additional access to this property as the IEPA also has a monitoring well (MW-127) located on this property.

#### SAMPLE/TEST DATA SUBMITTALS:

None.

### RD SCHEDULE UPDATE: (attach updated schedule as necessary)

As the activities associated with the Pre-Design Investigation portion of the Remedial Design (RD) continue, the overall schedule continues to be revised. A scope of work concerning the source mass reduction (by excavation) of near surface impacted soils in the OSA was submitted to the USEPA and IEPA in April. Comments on the work plan were received at the end of May. It is anticipated that the plan will be approved in August. This source mass reduction activity is anticipated to take place in Summer 2005 based on agency approval of the plan.

Access to potential source materials beneath the HS facility building will require the use of horizontal drilling. As mentioned previously, off-site access will be required for implementation of this technique. Access to off-site properties presents a potential to affect the schedule for implementation. HS is working on logistical issues associated with this drilling technology and will continue to work with the USEPA on keeping the RD efforts for Area 9/10 moving forward in a timely and reasonable fashion.

### **REALIZED/ANTICIPATED PROBLEM CONDITIONS:**

None.

#### PERSONNEL CHANGES:

None.